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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	Shu-Heng Sun	Art Unit:	3746
Series No	10/751,066	Examiner:	RODRIGUEZ, WILLIAM H
Filed	01/05/2004		
Title	GAS EXPLOSION MACHINE		

Mail Stop Non-Fee Amendment

Honorable Assistant Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

Responsive to the Official Action dated at 06 / 25 / 2007, please amend the above-referenced Patent Application as following:

AMENDMENT

IN THE TITLE

Please delete the original title of the invention and amend the title as "LIQUID FUEL COMBUSTION MACHINE HAVING WATER INJECTINO

"

IN THE SPECIFICATION

Please amend the original Specification with the Substitution Specification enclosed herewith. A mark up version and a clean version are listed appended, where those cancelled are deleted by a cross line and those amended are indicated by an underline. The Substitute Specification was necessitated due to some errors disclosed in the office action. This is kindly noted by the Examiner. The Substitute Specification is inserted for purpose of clarity and ease of understanding by the Examiner. From the mark-up version appended, it is appreciated that no new matter has been incorporated therein.

IN THE CLAIM

Please cancel Claims 2 to 4, without prejudice or disclaimer of the subject matter thereof, and amend claims 1 and 5. The amended claim 1 is based on the suggestion in the office action and the original claims 2 to 4 are incorporated into the amended claim 1. The amendment of claim 5 is based on the suggestion in the office action. Thereby, it is assured that the new claims are based on the original claim and specification and thus no new matter is added. The relation of the new claims with respect to the original claims are shown in the following REMARK, Examiners can read the claims more easily from the REMARK.

LIST OF CLAIMS:

Claim 1. (Currently Amended) A liquid fuel combustion machine having water injection ~~An air explosive machine~~ comprising an outward cambered front surface, a tapered rear surface, an exhaust nozzle ~~air nozzle~~ at a distal end of the rear surface and having a reduced opening; a check valve pivotally installed on the exhaust nozzle ~~air nozzle~~; the front surface of the liquid fuel combustion machine ~~air explosive machine~~ 1 being formed with a plurality of fuel injection nozzles ~~oil injecting holes~~ and a plurality of water injection nozzles ~~moisture injecting holes~~ for being connected with fuel atomizing ~~moisturizing~~ devices and moisture input devices; and .

~~2. The air explosive machine as claimed in claim 1,~~ wherein for the fuel atomizing device; the fuel injection nozzle in the front surface is installed with a fuel gasifying tube; each fuel gasifying tube is connected to a stub tube for being connected with an oil tube and an air tube; a front end of the oil tube is installed with an oil pump and an oil tank; a front end of the air

tube is installed with an air box; and the air box is connected to an air compressor;

~~3. The air explosive machine as claimed in claim 2,~~ wherein the oil tube is installed with a main valve and the air tube is installed with another main valve; and

~~4. The air explosive machine as claimed in claim 2,~~ wherein the stub tube is installed with a main valve.

Claims 2 to 4 (Cancelled)

Claim 5. (Currently Amended) The liquid fuel combustion machine having water injection ~~air explosive machine~~ as claimed in claim 1, wherein in the moisture input devices, a plurality of water injection nozzles ~~moisture injecting holes~~ 110 in a front surface of the combustion chamber ~~explosive air storage tank~~ 10 and a plurality of water injection nozzles ~~moisture injecting holes~~ 110 is formed in a lateral peripheral surface of the combustion chamber ~~explosive air storage tank~~ 10; each of the water injection nozzles ~~moisture injecting hole~~ 112,101 is formed with a water ~~moisture~~ nozzle 33; each water nozzle 33 is connected to the water pump 31 and the water box 30 through a transfer tube.

REMARKS

Very thanks for Examination's suggestion and thanks for finding some citations about the present invention, thereby, the applicant may know more information about the invention. This case has been carefully reviewed and analyzed in view of the office action. All details of the reference prior arts are fully considered and compared with the present invention.

ABOUT THE REJECTION SPECIFICATION

Responsive to the objections and rejections made of the Examiner in office action. We have amended the specification, claims and abstracts. All the errors disclosed in that office action has been corrected according to the Examiner's indications disclosed in the official action.

ABOUT CLAIM REJECTION OF 35USC103

Indeed the citations disclose some features of the present invention, and the applicant agrees with these viewpoints, however applicant discovers that some main features of the present invention are not disclosed in the citation which can form the novelty and inventive step of the present invention.

To illustrate the novelty of the present invention and overcome the objection from the citations, the applicant decides to cancel Claims 2 to 4, without prejudice or disclaimer of the subject matter thereof, and amend claims 1 and 5. The amended claim 1 is based on the suggestion in the office action and the original claims 2 to 4 are incorporated into the amended claim 1. The amendment of claim 5 is based on the suggestion in the office action. Thereby, it is assured that the new claims are based on the original claim and specification and thus no new matter is added. The relation of the new claims with respect to the original claims are shown in the following.

CLAIMS SHOW CHANGES AND NUMERALS FOR DISCUSSING IN THE REMARK

WHAT IS CLAIMED IS:

Claim 1. (Currently Amended) A liquid fuel combustion machine having water injection ~~An air explosive machine~~ comprising an outward cambered front surface, a tapered rear surface, an exhaust nozzle ~~air nozzle~~ 40 at a distal end of the rear surface and having a reduced opening; a check valve 41 pivotally installed on the exhaust nozzle ~~air nozzle~~; the front surface of the liquid fuel combustion machine ~~air explosive machine~~ 1 being formed with a plurality of fuel injection nozzles ~~oil injecting holes~~ and a plurality of water injection nozzles ~~moisture injecting holes~~ 112 for being connected with fuel atomizing ~~moisturizing~~ devices and moisture input devices; and

~~2. The air explosive machine as claimed in claim 1,~~ wherein for the fuel atomizing device; the fuel injection nozzle in the front surface is installed with a fuel gasifying tube 26; each fuel gasifying tube is connected to a stub tube 221 for being connected with an oil tube and an air tube 25; a front end of the oil tube 22 is installed with an oil pump and an oil tank 20; a front end of the air tube 25 is installed with an air box 24; and the air box is connected to an air compressor 23;

~~3. The air explosive machine as claimed in claim 2,~~ wherein the oil tube 22 is installed with a main valve 27 and the air tube 25 is installed with another main valve 27; and

~~4. The air explosive machine as claimed in claim 2,~~ wherein the stub tube 221 is installed with a main valve 28.

Claims 2 to 4 (Cancelled)

Claim 5. (Currently Amended) The liquid fuel combustion machine having water injection ~~air explosive machine~~ as claimed in claim 1, wherein in the moisture input devices, a plurality of water injection nozzles ~~moisture injecting holes~~ 110 in a front surface of the combustion chamber ~~explosive air storage tank~~ 10 and a plurality of water injection nozzles ~~moisture injecting holes~~ 110 is formed in a lateral peripheral surface of the combustion chamber ~~explosive air storage tank~~ 10; each of the water injection nozzles ~~moisture injecting hole~~ 112,101 is formed with a water ~~moisture~~ nozzle 33; each water nozzle 33 is connected to the water pump 31 and the water box 30 through a transfer tube.

DISCUSSION ABOUT THE NOVELTY THE PRESENT INVENTION

(A) In the present invention, see Fig. 2 of the present invention, it is illustrated that the fuel gasifying tube 26 is connected to the air box 24 and oil tank 20. Thus fuel from the oil tank 20 and the gas from the air box 24 are mixed in the fuel gasifying tube 26 and then are injected into the combustion chamber 10.

There are two citations USP4385661 and USP4174941 are used to object the present invention. However the two citations do not disclosed anything about the air compressor and anything about air injection path. **Thus, they do not disclose that the air and fuel are mixed in an injection tube and then are injected into the chamber for combustion.** In most design, the air and fuel are mixed in the cylinder instead in the chamber of a cylinder. However, the design of the present invention will make the mixing of the air and fuel have higher efficiency.

(B) RESULT

From above discussion, it is known that the combination of all the citations cannot have the above feature which makes the combustion has higher efficiency .

Since in above discussion, it is apparent that no prior art has the features of the present invention, especially in the amended claim 1. Furthermore, as we know that no other prior art has features of the present invention. Thus, the present invention is novel and inventive.

If there is any error in the specification, or claims, applicant requests and authorizes Examiner to amend the claims, specification and drawings of the present invention so that they can match the requirement of U. S. Patent. Attentions of Examiner to this matter are greatly appreciated.

It is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectively requested.

Respectfully submitted.

SUN, SHU-HENG

Dated: 09 / 22 /2006

235 Chung – Ho Box 8-24

Taipei Taiwan R. O. C.

"MARK-UP" COPY OF THE AMENDED SPECIFICATION

~~GAS EXPLOSION MACHINE~~ LIQUID FUEL COMBUSTION MACHINE HAVING WATER INJECTINO

Field of the invention

The present invention relates to gas explosion machines, and particular to a liquid fuel combustion machine having water injection ~~gas explosion machine~~, wherein fuel and air are mixed and explode completely. The combustion is completely and no waste air generates. ~~The thermal energy generated from the explosion is stored in the explosive air storage tank. No energy lose occurs since no tube is used to transfer the energy.~~

Background of the invention

Steam machine is widely used conventionally as a power source for generating power. Most of the plants, such as nuclear power plants, use steam machines as power source. However, this prior art way needs a larger area to built a power plant and then electric power is transferred through a long transfer path. Thereby, the power lose in the transmission is large, thus power efficiency is low. Since a power plant needs a larger area and thus it is built far from those places using the power. This also induces some inconveniency to human people. Thereby, there is an eager demand for a novel design which can improve the prior art defect.

Summary of the invention

Accordingly, the primary object of the present invention is to provide a liquid fuel combustion machine ~~an ir explosive machine~~ which comprises a cambered front surface, a tapered rear surface, an exhaust nozzle ~~air nozzle~~

at a distal end of the rear surface and having a reduced opening; a check valve pivotally installed on the exhaust nozzle ~~air nozzle~~; the front surface of the liquid fuel combustion machine ~~air explosive machine~~ being formed with a plurality of fuel injection nozzles ~~oil injecting holes~~ and a plurality of water injection nozzles ~~moisture injecting holes~~ for being connected with fuel atomizing ~~moisturizing~~ devices and moisture input devices. The pushing force from the liquid fuel combustion machine ~~air explosive machine~~ is very great so as to effectively actuate a machine. In the present invention, the fuel and air are mixed and explode. ~~The combustion is completely and no waste air generates. The thermal energy generated from the explosion is stored in the explosive air storage tank. No energy lose occurs since no tube is used to transfer the energy.~~

The various objects and advantages of the present invention will be more readily understood from the following detailed description when read in conjunction with the appended drawing.

Brief description of THE drawings

Fig. 1 is a schematic view of the present invention.

Fig. 2 is a schematic view about the arrangement of the front surface of the present invention.

Fig. 3 is a schematic view about the oil tube of the present invention.

Fig. 4 is a schematic view about one embodiment of the present invention.

Detailed description of the invention

In order that those skilled in the art can further understand the present invention, a description will be described in the following in details. However, these descriptions and the appended drawings are only used to

cause those skilled in the art to understand the objects, features, and characteristics of the present invention, but not to be used to confine the scope and spirit of the present invention defined in the appended claims.

With reference to Fig. 1, the liquid fuel combustion machine ~~air explosive machine~~ 1 of the present invention is illustrated. The liquid fuel combustion machine ~~air explosive machine~~ 1 includes a cambered front surface 11, a tapered rear surface 12, an exhaust nozzle ~~air nozzle~~ 40 at a distal end of the rear surface 12 and having a reduced opening; a check valve 41 pivotally installed on the exhaust nozzle ~~air nozzle~~ 40. The front surface 11 of the liquid fuel combustion machine ~~air explosive machine~~ 1 is formed with a plurality of fuel injection nozzles ~~oil injecting holes~~ 111 and a plurality of water injection nozzles ~~moisture injecting holes~~ 112b for being connected with fuel atomizing ~~moisturizing~~ devices and moisture input devices.

With reference to Figs. 1 and 2, in the fuel atomizing ~~moisturizing~~ machine, the fuel injection nozzle ~~oil injecting hole~~ 111 is installed with a fuel gasifying tube 26. Each fuel gasifying tube 26 is connected to a stub tube 221. A distal end of each stub tube 221 is connected to an oil tube 22. The oil tube 22 is installed with a main valve ~~main switch~~ 27 for fully controlling the opening and closing of the stub tube 221. Each stub tube 221 is installed with a main valve ~~switch~~ 28 for controlling the flow rate of the fuel gasifying tube 26 by closing or opening of the fuel gasifying tube 26. A front end of each oil tube 22 is connected to an oil pump 21 and an oil tank 20. When the oil pump 21 is actuated, the fuel in the oil tank 20 is pumped out. The oil flows through the oil tube 22 and the stub tube 221 to the fuel gasifying tube 26.

Referring to Figs. 2 and 3, each fuel gasifying tube 26 is connected to a stub tube 251. A distal end of each stub tube 251 is connected to an ~~a~~ air tube 25. A main valve ~~main switch~~ 28 is installed in the stub tube 251.

The air flow rate for the air flowing into the fuel gasifying tube 26 is controllable by the opening and closing the main valve ~~switch~~ 28. An air box 24 is installed at a front end of the air tube 25. An air compressor 23 serves to supply compressed air into the air box 24 ~~for moisturizing liquid fuel. Then the moisture is injected into the explosive air storage tank 10~~.

In the moisture input devices, a plurality of water injection nozzles ~~moisture injecting holes~~ 112 in a front surface 11 of the combustion chamber ~~explosive air storage tank~~ 10 and a plurality of water injection nozzles ~~moisture injecting holes~~ 101 are formed in a lateral peripheral surface of the combustion chamber ~~explosive air storage tank~~ 10. Each of the water injection nozzles ~~moisture injecting hole~~ 112, 101 is formed with a water ~~moisture~~ nozzle 33. The water nozzle 33 is connected to the water pump 31 and the water box 30 through a transfer tube 32. When the water pump 31 is actuated, water in the water box 30 will inject water into the combustion chamber ~~explosive air storage tank~~ 10 through the transfer tube 32 and the water ~~moisture~~ nozzle 33.

~~The use of the explosive air storage tank 10 is to replace the current used boiler of a steam machine.~~ An igniter is installed in the combustion chamber ~~explosive air storage tank~~ 10. The liquid fuel outputted from the oil tank 20 is mixed with air in the air box 24 and then the mixture is injected the combustion chamber ~~explosive air storage tank~~ 10, which is then exploded by the igniter.

Referring to Fig. 4, one embodiment of the present invention is illustrated. ~~The explosive air storage tank 10 is like an air box in the steam machine.~~ When explosion occurs in the combustion chamber ~~explosive air storage tank~~ 10, a great thermal energy generates from the explosion of the fuel. Then water pump 31 starts, the water in the water box 30 is atomized ~~moisturized~~ by the water nozzles 33 so as to generate moisture and then the moisture is transferred to the combustion chamber 10.

~~Thereby, the exploded fire in the water pump 31 is injected by the moisture so as to generate steam.~~ Other than reducing the temperature of the fire, this method causes that the expansion force of air is increased so as to increase pressure, and pushing force. This large energy can be used to open a valve 41 so as to actuate a machine behind the liquid fuel combustion machine ~~air explosive machine~~ 1. For example, the push force from the air explosion can be used to push, for example, a pulley behind the liquid fuel combustion machine ~~air explosive machine~~ 1 to rotate. Moreover, the pushing force generated by the present invention can be used to control the flow rate of the main valve ~~main switch~~ 27 and the main valve ~~switch~~ 28 so as to further control the oil input and moisture rate flowing into the combustion chamber ~~explosive air storage tank~~ 10.

Therefore, by above said structure and operation, the present invention has the following advantages.

The pushing force from the liquid fuel combustion machine ~~air explosive machine~~ is very great so as to effectively actuate a machine. In the present invention, the fuel and air are mixed and explode. ~~The combustion is completely and no waste air generates.~~ The thermal energy generated from the explosion is stored in the combustion chamber ~~explosive air storage tank~~. ~~No energy lose occurs since no tube is used to transfer the energy.~~ However, in the prior art, the flame generated from a steam machine passes through a boiler in a short time period, but energy will be consumed at this stage. Thereby, the efficiency of the steam machine is low, but in the present invention, thermal energy is used completely. Thereby, air is used to assist the combustion and injection of moisture causes air to expansion. This also increases the thermal energy.

~~Furthermore, the heated air generated in the present invention can be used to push a machine, which is greatly over the steam.~~ In the present invention, a plurality of oil injection openings can be opened or closed as

desired without the danger of explosion. The size of the liquid fuel combustion machine ~~air explosive machine~~ of the present invention can be designed as desired so as to achieve the object of saving thermal power. ~~In the present invention, since all the thermal energy is used up, the fuel is used effectively.~~ The liquid fuel combustion machine ~~air explosive machine~~ of the present invention is integrally formed. The manufacturing cost is low and installation of the liquid fuel combustion machine ~~air explosive machine~~ is easy. The plant for manufacturing the liquid fuel combustion machine ~~air explosive machine~~ can be built easily with a lower cost and a small land. The location of the plant is not limited. Thereby, the power supplied system for the plant is also provided easily.

The present invention can be used after it is installed with less labors and cost. The cost of the electric power is low so as to provide cheap electric power. The air used in the present invention also has heat energy which can be used further.

The present invention is thus described, it will be obvious that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the present invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.

ABSTRACT

A liquid fuel combustion machine ~~An air explosive machine~~ comprises a cambered front surface, a tapered rear surface, an exhaust nozzle ~~air nozzle~~ at a distal end of the rear surface and having a reduced opening; a check valve pivotally installed on the exhaust nozzle ~~air nozzle~~; the front surface of the liquid fuel combustion machine ~~air explosive machine~~ being formed with a plurality of fuel injection nozzles ~~oil injecting holes~~ and a plurality of water injection nozzles ~~moisture injecting holes~~ for being connected with fuel atomizing ~~moisturizing~~ devices and moisture input devices. The pushing force from the liquid fuel combustion machine ~~air explosive machine~~ is very great so as to effectively actuate a machine. In the present invention, the fuel and air are mixed and explode. The combustion is completely and no waste air generates. The thermal energy generated from the explosion is stored in the combustion chamber ~~explosive air storage tank~~. No energy lose occurs since no tube is used to transfer the energy.

"CLEAN" COPY OF THE AMENDED SPECIFICATION

LIQUID FUEL COMBUSTION MACHINE HAVING WATER INJECTINO

Field of the invention

The present invention relates to gas explosion machines, and particular to a liquid fuel combustion machine having water injection, wherein fuel and air are mixed and explode completely. The combustion is completely and no waste air generates.

Background of the invention

Steam machine is widely used conventionally as a power source for generating power. Most of the plants, such as nuclear power plants, use steam machines as power source. However, this prior art way needs a larger area to built a power plant and then electric power is transferred through a long transfer path. Thereby, the power lose in the transmission is large, thus power efficiency is low. Since a power plant needs a larger area and thus it is built far from those places using the power. This also induces some inconveniency to human people. Thereby, there is an eager demand for a novel design which can improve the prior art defect.

Summary of the invention

Accordingly, the primary object of the present invention is to provide a liquid fuel combustion machine which comprises a cambered front surface, a tapered rear surface, an exhaust nozzle at a distal end of the rear surface and having a reduced opening; a check valve pivotally installed on the exhaust nozzle; the front surface of the liquid fuel combustion machine being

formed with a plurality of fuel injection nozzles and a plurality of water injection nozzles for being connected with fuel atomizing devices and moisture input devices. The pushing force from the liquid fuel combustion machine is very great so as to effectively actuate a machine. In the present invention, the fuel and air are mixed and explode.

The various objects and advantages of the present invention will be more readily understood from the following detailed description when read in conjunction with the appended drawing.

Brief description of THE drawings

Fig. 1 is a schematic view of the present invention.

Fig. 2 is a schematic view about the arrangement of the front surface of the present invention.

Fig. 3 is a schematic view about the oil tube of the present invention.

Fig. 4 is a schematic view about one embodiment of the present invention.

Detailed description of the invention

In order that those skilled in the art can further understand the present invention, a description will be described in the following in details. However, these descriptions and the appended drawings are only used to cause those skilled in the art to understand the objects, features, and characteristics of the present invention, but not to be used to confine the scope and spirit of the present invention defined in the appended claims.

With reference to Fig. 1, the liquid fuel combustion machine 1 of the present invention is illustrated. The liquid fuel combustion machine 1 includes a cambered front surface 11, a tapered rear surface 12, an exhaust nozzle 40 at a distal end of the rear surface 12 and having a reduced opening;

a check valve 41 pivotally installed on the exhaust nozzle 40. The front surface 11 of the liquid fuel combustion machine 1 is formed with a plurality of fuel injection nozzles 111 and a plurality of water injection nozzles 112b for being connected with fuel atomizing devices and moisture input devices.

With reference to Figs. 1 and 2, in the fuel atomizing machine, the fuel injection nozzle 111 is installed with a fuel gasifying tube 26. Each fuel gasifying tube 26 is connected to a stub tube 221. A distal end of each stub tube 221 is connected to an oil tube 22. The oil tube 22 is installed with a main valve 27 for fully controlling the opening and closing of the stub tube 221. Each stub tube 221 is installed with a main valve 28 for controlling the flow rate of the fuel gasifying tube 26 by closing or opening of the fuel gasifying tube 26. A front end of each oil tube 22 is connected to an oil pump 21 and an oil tank 20. When the oil pump 21 is actuated, the fuel in the oil tank 20 is pumped out. The oil flows through the oil tube 22 and the stub tube 221 to the fuel gasifying tube 26.

Referring to Figs. 2 and 3, each fuel gasifying tube 26 is connected to a stub tube 251. A distal end of each stub tube 251 is connected to an air tube 25. A main valve 28 is installed in the stub tube 251. The air flow rate for the air flowing into the fuel gasifying tube 26 is controllable by the opening and closing the main valve 28. An air box 24 is installed at a front end of the air tube 25. An air compressor 23 serves to supply compressed air into the air box 24.

In the moisture input devices, a plurality of water injection nozzles 112 in a front surface 11 of the combustion chamber 10 and a plurality of water injection nozzles 101 are formed in a lateral peripheral surface of the combustion chamber 10. Each of the water injection nozzles 112, 101 is formed with a water nozzle 33. The water nozzle 33 is connected to the water pump 31 and the water box 30 through a transfer tube 32. When the

water pump 31 is actuated, water in the water box 30 will inject water into the combustion chamber 10 through the transfer tube 32 and the water nozzle 33.

An igniter is installed in the combustion chamber 10. The liquid fuel outputted from the oil tank 20 is mixed with air in the air box 24 and then the mixture is injected the combustion chamber 10, which is then exploded by the igniter.

Referring to Fig. 4, one embodiment of the present invention is illustrated. When explosion occurs in the combustion chamber 10, a great thermal energy generates from the explosion of the fuel. Then water pump 31 starts, the water in the water box 30 is atomized by the water nozzles 33 so as to generate moisture and then the moisture is transferred to the combustion chamber 10. Other than reducing the temperature of the fire, this method causes that the expansion force of air is increased so as to increase pressure, and pushing force. This large energy can be used to open a valve 41 so as to actuate a machine behind the liquid fuel combustion machine 1. For example, the push force from the air explosion can be used to push, for example, a pulley behind the liquid fuel combustion machine 1 to rotate. Moreover, the pushing force generated by the present invention can be used to control the flow rate of the main valve 27 and the main valve 28 so as to further control the oil input and moisture rate flowing into the combustion chamber 10.

Therefore, by above said structure and operation, the present invention has the following advantages.

The pushing force from the liquid fuel combustion machine is very great so as to effectively actuate a machine. In the present invention, the fuel and air are mixed and explode. The thermal energy generated from the explosion is stored in the combustion chamber. However, in the prior art, the flame generated from a steam machine passes through a boiler in a short

time period, but energy will be consumed at this stage. Thereby, the efficiency of the steam machine is low, but in the present invention, thermal energy is used completely. Thereby, air is used to assist the combustion and injection of moisture causes air to expansion. This also increases the thermal energy.

In the present invention, a plurality of oil injection openings can be opened or closed as desired without the danger of explosion. The size of the liquid fuel combustion machine of the present invention can be designed as desired so as to achieve the object of saving thermal power. The liquid fuel combustion machine of the present invention is integrally formed. The manufacturing cost is low and installation of the liquid fuel combustion machine is easy. The plant for manufacturing the liquid fuel combustion machine can be built easily with a lower cost and a small land. The location of the plant is not limited. Thereby, the power supplied system for the plant is also provided easily.

The present invention can be used after it is installed with less labors and cost. The cost of the electric power is low so as to provide cheap electric power. The air used in the present invention also has heat energy which can be used further.

The present invention is thus described, it will be obvious that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the present invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.

ABSTRACT

A liquid fuel combustion machine comprises a cambered front surface, a tapered rear surface, an exhaust nozzle at a distal end of the rear surface and having a reduced opening; a check valve pivotally installed on the exhaust nozzle; the front surface of the liquid fuel combustion machine being formed with a plurality of fuel injection nozzles and a plurality of water injection nozzles for being connected with fuel atomizing devices and moisture input devices. The pushing force from the liquid fuel combustion machine is very great so as to effectively actuate a machine. In the present invention, the fuel and air are mixed and explode. The combustion is completely and no waste air generates. The thermal energy generated from the explosion is stored in the combustion chamber. No energy lose occurs since no tube is used to transfer the energy.